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CLAIMS:

1. An air supply system for the driver of a vehicle, the system comprising an air-conditioning unit including an evaporator, a condenser and a compressor coupled in close circuit to cycle a refrigerant, a fan being positioned adjacent the evaporator to draw a source of fresh air through the evaporator and into an air conduit arranged to be coupled directly to the driver, the compressor and fan being driven by a low voltage DC electric motor.
2. The air supply system according to claim 1 wherein the air conduit incorporates a filter to control the rate of flow and filter out dangerous gases such as carbon monoxide.
3. The air supply system according to claim 2 wherein the flow rate is controlled to be approximately 2 litres per second.
4. The air supply system according to any one of the preceding claims wherein the system is coupled to a data logger that monitors the relative humidity and temperatures in the vehicle.
5. The air supply system according to any one of the preceding claims wherein the driver is arranged to be wearing a suit and/or helmet and the air conduit is coupled to the suit and/or helmet.
6. A reverse cycle air-conditioning unit comprising an evaporator, a condenser and a compressor coupled in a closed circuit to cycle a refrigerant, the compressor being powered by a low voltage DC electric motor and the circuit including a valve to reverse the direction of flow of the refrigerant.

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7. The reverse cycle air-conditioning unit according to claim 6 wherein the evaporator and condenser are positioned adjacent a fan driven by a low voltage DC electric motor.

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8. The reverse cycle air-conditioning unit according to either claim 6 or claim 7 wherein the voltage is either 12 or 24 volts.

10 9. The reverse cycle air-conditioning unit according to any one of claims 6 to 8 wherein the valve comprises a four-way valve operable by a solenoid to reverse the direction of flow of the refrigerant.